

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 9/8/2009 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-5, 7-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schubert et al. (US Patent # 6,894,610 B2), and further in view of Fan et al. (US Patent # 6,452,572 B1).

Consider claim 7, Schubert et al. teaches a warning system for people working in hazardous conditions, the warning system comprising: a control unit (central monitoring unit) (1, Fig. 1) with a motion detector (5, Fig. 1), an alarm transmitter (communication module) (16, Fig. 1) and a display (2 or 3, Fig. 1), wherein the warning system further comprises a receiver (inherent in the communication module) (16, Fig. 1), the control unit (central monitoring unit) (1,

Fig. 1) configured to operate selectively as: a) a standalone base warning unit (Column 2 lines 15-20); b) via a radio connection with at least one of: i) a radio pressure gauge for a compressed air breathing apparatus; ii) a vital function radio monitor; and iii) a radio measuring device for detecting gas and temperature conditions; and c) via a physical link connection with at least one of i) a radio data transmitter; and ii) a walkie-talkie.), except a wireless radio connection and memory for recording incidents.

In the same field of endeavor, Fan et al. teaches a wireless radio connection (720A, Fig. 37) and memory for recording incidents (Claims 4 and 5) for the benefit of transmitting information via wireless communication and recording image to the base control center.

Therefore, it would have been obvious to a person of ordinary skill in the art at time the invention was made to include a wireless radio connection and memory for recording incidents as shown in Fan et al., in Schubert et al. device for the benefit of transmitting information via wireless communication and recording image to the base control center.

Consider claim 2, Schubert et al. clearly shown and disclose the warning system, characterized in that wherein the radio pressure gauge is a pressure sensor (15, Fig. 1) with a short-distance transmitter (communication module) (16, Fig. 1) connected to a compressed-air cylinder (Column 3 lines 8-26).

Consider claim 3, Schubert et al. clearly shown and discloses the warning system, characterized in that wherein the vital function radio monitor includes at least a vital sensor (Column 1 line 50) combined with a short-distance transmitter (communication module) (11, Fig.1) for collecting a user's vital data.

Consider claim 4, Schubert et al. clearly shown and discloses the warning system, characterized in that wherein the radio measuring device includes a gas or temperature sensor (15, Fig. 1) coupled with a short-distance transmitter (communication module) (11, Fig. 1) (Column 3 lines 8-26).

Consider claim 5, Schubert et al. clearly shown and discloses the warning system, characterized in that wherein the control unit (monitoring unit) (1, Fig. 1) is configured to allow coupling of a camera (14, Fig. 1) and/or thermal image camera can be coupled with the control unit (Column 3 lines 34-44).

Consider claim 8, Schubert et al. clearly shown and disclose the warning system wherein the control unit (monitoring unit) (1, Fig. 1) is configured to operate via a radio connection with each of a radio pressure gauge for a compressed air breathing apparatus, a vital function radio monitor and a radio measuring device for detecting gas and temperature conditions (Column 4 lines 22-34 and Column 1 lines 40-45).

Consider claims 9 and 10, Schubert et al. clearly shown and disclose the warning system wherein the control unit is configured to operate via a physical link (fiber optics) (Column 4 lines 34-35) connection with each of a radio data transmitter (telemetric module 17) except a walkie-talkie. Although Schubert et al. does not specifically disclose the walkie-talkie, he does disclose a communication module (16, Fig. 1) in the helmet/mask (Column 3 lines 38-39) for transfer the information. The walkie-talkie is just a device selection among the communication protocol, such selection is a design choice for the particular application.

Consider claim 11, Schubert et al. teaches a warning system for people working in hazardous conditions, the warning system comprising: a control unit (monitoring unit) (1, Fig. 1)

with a motion detector (5, Fig. 1), an alarm transmitter (4, Fig. 1) and a display (2 or 3, Fig. 1), wherein the warning system further comprises a receiver (inherent in the communication module) (16, Fig. 1), the control unit configured to operate selectively as: a) a standalone base warning unit; or b) via a radio connection with at least one of: i) a radio pressure gauge for a compressed air breathing apparatus; ii) a vital function radio monitor; and iii) a radio measuring device for detecting gas and temperature conditions (Column 1 lines 36-59), except a memory for recording incidents integrated into the control unit, except wireless radio connection and memory for recording incidents.

In the same field of endeavor, Fan et al. teaches a wireless radio connection (720A, Fig. 37) and memory for recording incidents (Claims 4 and 5) for the benefit of transmitting information via wireless communication and recording image to the base control center.

Therefore, it would have been obvious to a person of ordinary skill in the art at time the invention was made to include a wireless radio connection and memory for recording incidents as shown in Fan et al., in Schubert et al. device for the benefit of transmitting information via wireless communication and recording image to the base control center.

Consider claim 13, Schubert et al. clearly shows and disclose the warning system for people working in hazardous conditions wherein a radio data transmitter is connected to the control unit for transmitting data received by the control unit to at least one of a master station and a data-capable walkie talkie for communication with another control unit and/or the master station (Column 3 lines 35-43).

4. Claims 12, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schubert et al. (US Patent # 6,894,610 B2) in view of Fan et al. (US Patent # 6,452,572 B1) as applied to claims 7 and 11 above, and further in view of Bieback (US Patent # 5,990,793).

Consider claim 12, Schubert et al. and Fan et al. combined references teaches the warning system for people working in hazardous conditions except wherein the control unit has an overall configuration and size that allows the control unit to be carried on a person, as in a pocket.

In the same field of endeavor, Bieback teaches wherein the control unit (11, Fig. 5) has an overall configuration and size that allows the control unit to be carried on a person (Column 7 lines 31-40) for the benefit of conveniently transport through the hazardous environment.

Therefore, it would have been obvious to a person of ordinary skill in the art at time the invention was made to include the control unit has an overall configuration and size that allows the control unit to be carried on a person as shown in Bieback for the benefit of conveniently transport through the hazardous environment.

Consider claim 14, Schubert et al. and Fan et al. combined references teaches the warning system for people working in hazardous conditions, except wherein the control unit is configured to operate via the wireless radio connection and has an overall configuration and size that allows the control unit to be carried on a person, as in a pocket.

In the same field of endeavor, Bieback teaches the control unit (11, Fig. 5) is configured to operate via the wireless radio connection (radio transceiver) and has an overall configuration and size that allows the control unit to be carried on a person, as in a pocket (Column 7 lines 31-40) for the benefit of conveniently transport through the hazardous environment.

Therefore, it would have been obvious to a person of ordinary skill in the art at time the invention was made to include the control unit is configured to operate via the wireless radio connection and has an overall configuration and size that allows the control unit to be carried on a person, as in a pocket as shown in Bieback, in Schubert et al. and Fan et al. combined device for the benefit of conveniently transport through the hazardous environment.

Consider claims 15 and 16, Schubert et al. and Fan et al. combined references teaches the warning system for people working in hazardous conditions, except wherein the control unit is configured to operate via the wireless radio connection.

In the same field of endeavor, Bieback teaches the control unit (11, Fig. 5) is configured to operate via the wireless radio (wireless transceiver) connection (column 7 lines 31-40) for the benefit of conveniently transport through the hazardous environment.

Therefore, it would have been obvious to a person of ordinary skill in the art at time the invention was made to include the control unit is configured to operate via the wireless radio connection as shown in Bieback, in Schubert et al. and Fan et al. combined device for the benefit of conveniently transport through the hazardous environment.

Response to Arguments

5. Applicant's arguments filed 9/8/2009 have been fully considered but they are not persuasive.

Regarding claims 2-5 and 7-11. Applicant argues that the statement of "there is no evidence that if person skilled in the art who were presumably working on the problem knew of the teaching of the above cited references, they would still be unable to solve the problem." cited

in Prior Office Action was not fully understood by Applicant. In response to applicant's argument that there is not obvious to arrive at the claimed solution with the references provided, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Schubert et al. teaches all of limitation claimed by Applicant, except the wireless communication. It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace wired communication bus with wireless communication bus since it was known in the art that wired and wireless communication bus performs same function, wherein without the wire will ease the device mobility. Applicant simply applies existing technology available at the time of the invention was made to the well known invention made by Schubert et al.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACK WANG whose telephone number is (571)272-1938. The examiner can normally be reached on M-F 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Bugg can be reached on 571-272-2998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JACK WANG/
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